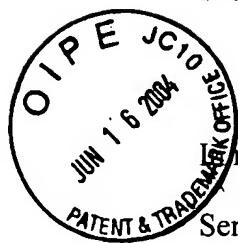


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant Application of: SUNDARAM, Mani et al.

Group Art Unit: 2878

Serial No. 10/803,295

Examiner:

Filed: 03/18/2004

Atty. Dkt. No: 20030127-US

For: QWIP WITH ELECTRON LAUNCHER FOR REDUCING DIELECTRIC
RELAXATION EFFECT IN LOW BACKGROUND CONDITIONS

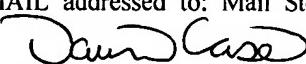
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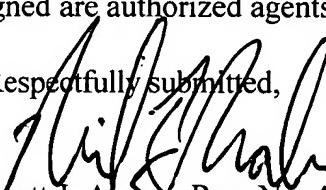
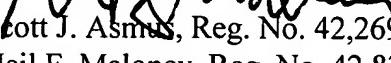
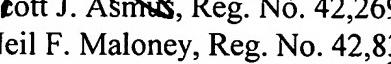
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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Transmitted herewith is the Applicant's Information Disclosure Statement, 2 sheets form PTO/SB/08A and/or PTO/SB/08B, and 5 references and other information. Pursuant to 37 CFR 1.98 (a)(2)(i) applicant has not transmitted herewith copies of cited U.S. Patents and U.S. patent application publications as the above application was filed after June 30, 2003. Please enter in the above application and communicate in all related matters with the undersigned.

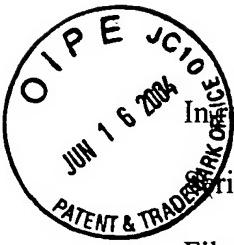
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Respectfully submitted,


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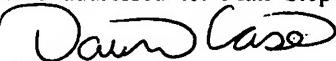
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 Dawn M. Case

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INFORMATION DISCLOSURE STATEMENT

Applicants submit this statement and the attached 2 sheet(s) of form PTO/SB/08A and/or PTO/SB/08B and 5 references and other information in accordance to the duty of disclosure under 37 C.F.R. §§1.56, 1.97, and 1.98, and requests consideration hereof. Pursuant to 37 CFR 1.98 (a)(2)(i) applicant has not transmitted herewith copies of cited U.S. Patents and U.S. patent application publications as the above application was filed after June 30, 2003.

Compliance with 37 C.F.R. §1.97: This Information Disclosure Statement is filed within three (3) months of the filing date of a National Application or before the mailing date of a first office action on the merits. No fee or certification is required.

Information Cited: The Applicants hereby make of record in the above-identified application, the information listed on the attached form PTO/SB/08A and/or PTO/SB/08B. The order of presentation of the references should not be construed as an indication of the importance of the reference. As all the references listed on attached Form PTO/SB/08A and/or PTO/SB/08B are in English, no commentary is required.

Remarks: A copy of each reference, together with a listing on Form PTO/SB/08A and/or PTO/SB/08B, is submitted herewith. Applicants respectfully request that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;

2. The enclosed form PTO/SB/08A and/or PTO/SB/08B be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application; and

3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicants make no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

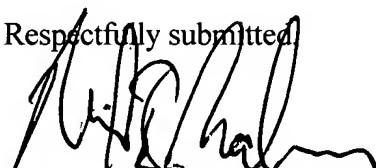
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Notwithstanding any statement by the Applicant, the Examiner is urged to form his own conclusion regarding the relevance of the cited information.

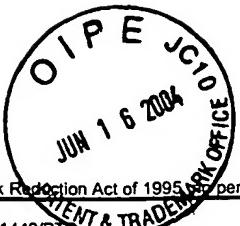
An early and favorable action is hereby requested.

Respectfully submitted,



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Neil F. Maloney, Reg. No. 42,833
Andrew P. Cernota, Reg. No. 52,711
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PTO/SB/08A (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known

Application Number	10/803,295
Filing Date	03/18/2004
First Named Inventor	SUNDARAM, Mani et al.
Art Unit	2878
Examiner Name	
Attorney Docket Number	20030127-US

Sheet 1 of 2

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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		Application Number	10/803,295
		Filing Date	03/18/2004
		First Named Inventor	SUNDARAM, Mani et al.
		Art Unit	2878
		Examiner Name	
Sheet	2	of	2
		Attorney Docket Number	20030127-US

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		GUNAPALA, SARATH et al., "MQW Based Blocked Intersubband Detector for Low Background Operation", NASA Tech Briefs, July 2001, pp 1-2, NPO-21073, NASA's Jet Propulsion Laboratory, Pasadena, CA.	
		BANDARA, SUMITH et al., "Quantum Well Infrared Photodetectors for Low Background Applications", www.eps.org, March 2001, p.1, Jet Propulsion Laboratory.	
		GUNAPALA, S. et al., "Quantum Well Infrared Photodetector (QWIP) Focal Plane Arrays", Semiconductors and Semimetals, 1999, pp 1-83, vol. 62.	
		GUNAPALA, S. et al., "640X486 Long-wavelength Two-color GaAs/AlGaAs Quantum Well Infrared Photodetector (QWIP) Focal Plane Array Camera", pp 1-24.	
		GUNAPALA, S. et al., "640X512 Pixel Four-Band, Broad-Band, and Narrow-Band Quantum Well Infrared Photodetector Focal Plane Arrays", pp 1-12.	

Examiner Signature	Date Considered
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